



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

## THE REPORT OF THE TARIFF BOARD ON COTTON MANUFACTURES

In its report on Cotton Manufactures, the Tariff Board has drawn conclusions which, if used as the basis for legislation, will necessitate material reductions in the duties of Schedule I. Conclusions so at variance with manufacturers' statements and protectionist arguments bespeak the independence and impartiality of the report. And the data collected, although in some respects incomplete, provide a valuable source of information for the study of comparative costs, prices, and industrial and commercial methods.

The investigation covered 81 spinning and weaving mills in the United States, with 5,210,836 spindles and 133,761 looms, or about one fifth of the total in the country. In the knit-goods industry the records of only 17 mills were examined. Information was obtained from England, France, Germany, Canada, and Japan, but the chief comparisons were between English and American spinning, weaving, and finishing costs and prices, and German and American knitting costs. England has been the leading competitor in the spinning, weaving, and finishing industries, and Germany in the knit-goods trade.

Inasmuch as raw cotton costs no more in the United States than in Europe, and is subject to no tariff duty in this country, the investigation was confined to manufacturing costs. Special branches, such as lace and embroidery making, were not investigated. The matter of the report may be divided into four parts: (1) spinning, (2) weaving, (3) finishing, and (4) knitting.

(1) The data for determining costs were taken from the books of manufacturers by agents of the Board. Owing to diversity in accounting methods it was necessary to formulate plans of cost determination which could be applied uniformly to the figures from each mill. In spinning, the Board was able to make its most complete analysis of both domestic and foreign costs. Not only is there less diversity of structure in yarns than in fabrics, but more detailed statements could be obtained from English spinners than from other foreign manufacturers.

The Board properly made allowance for the difference in the predominant technical methods in England and the United States,

and compared the costs of ring spinning in America with the costs of mule spinning in England. Although ring spindles are four times as numerous as mule spindles in the United States, American mule spinners' wages, which are much higher than ring spinners' wages, have in congressional tariff debates of the past been frequently used as a standard for comparison.

Owing to the variations in cost, even for spinning one sort of yarn, the selection of a standard which would be representative of the industry as a whole, was difficult. In England the variations were not negligible, but they were less than in American mills. In Lancashire the industry is highly specialized, and wages are regulated by standard lists. In the United States the industry is dispersed over a wider geographical area, and wages, methods, and systems are less standardized. Taking a typical example from the Tariff Board report, in twelve American mills the cost of spinning No. 28 warp yarn (exclusive of the cost of materials) varied from 2.9 to 4.5 cents per pound. In English mills the cost rarely varied more than one half cent per pound.

Instead of computing an average, the Tariff Board compared the figures from the mill in each country, which showed the lowest costs of each product. In a few instances the costs may have been abnormally low and therefore not representative. But the method had the merit of using actual costs from specific establishments. And since the lowest were compared, their utilization for purposes of tariff legislation would lessen the liability to protection of inefficiency. Taken as a whole the comparison is fair.

On this basis it was concluded that for the counts which constitute the bulk of the output of American mills, the lowest English cost, exclusive of raw materials, was about 73 per cent of the lowest American cost. Raw material, however, made up so large a proportion of the total expense that when that was reckoned in, the cost of producing yarn was only 3.8 to 11.9 per cent higher in America. On fine yarns the English spinners had a greater advantage.

The following table (abridged) indicates the differences in labor cost, in total conversion cost,<sup>1</sup> and the relative duties:

<sup>1</sup> By the term "conversion cost" is meant all the costs of manufacturing exclusive of the amount paid for raw materials.

			Difference in labor cost per pound of yarn	Difference in total conver- sion cost per pound of yarn	Duty
Warp yarn	No. 30.....		\$0.0058	\$0.0172	\$0.05
"	" No. 40.....		.0089	.0256	.08
"	" No. 50.....		.0136	.0375	.10
Weft	" No. 30.....		.0012	.0087	.05
"	" No. 40.....		.0031	.0148	.08
"	" No. 50.....		.0058	.0230	.10
"	" No. 60.....		.0069	.0285	.12
"	" No. 70.....		.0088	.0363	.14

No coarse yarns, which would have shown less divergence in costs, were included. But even on the medium counts the duty was in some instances nearly six times as great as the difference in manufacturing cost, and in every case exceeded that difference by a wide margin.

In view of the relatively small difference in labor cost, it seems improbable that the tariff brings much benefit to the operatives in the spinning departments of American cotton mills. The yarn duties, moreover, are of no great assistance to the American manufacturers. The advantages of producing yarn under the direct oversight of the manufacturer who is to weave it, and the costs of packing and shipping, are obstacles which would hinder any considerable importation of ordinary yarn even if the duties were abolished. And even on the protectionist theory that they should correspond to the difference in cost of production, the present duties should at least be reduced.

For thread, or sewing cotton, the Tariff Board did not ascertain any English costs. But it did obtain sufficient data to show the relation between American costs and the duties. On no one of the numerous samples was the duty less than half the American conversion cost, and as a rule it exceeded that cost, sometimes by 100 per cent. In every instance it at least equalled the labor cost and usually was two or three times as high. Since no price quotations for English thread are given, it is not possible to judge the effect of these duties on American prices. There is good reason for believing, however, that the prices have been increased somewhat by the duty, although not necessarily by the full amount. Comparative costs and prices would have been particularly interesting in this case, since it is the one branch of the cotton industry where monopolistic control of prices with the aid of tariff protection is to be suspected.

(2) Relatively more cloth than yarn is imported into the United States, yet the importation of cloth is not large. In value the imports of cloth were only 1.79 per cent of the domestic production in 1909-10. The duties, which average over 42 per cent ad valorem, have been restrictive; but that their influence on importation and prices has frequently been overestimated, is indicated by the report of the Tariff Board. Owing to the lack of foreign data, it was not possible to give a detailed comparison of weaving costs in English and American mills. Presumably the English manufacturers were unwilling to open their books to foreigners, by no means an unexpected obstacle. The Tariff Board consequently had to adopt other methods of indicating how the duties on cotton cloth should be adjusted.

Costs and prices were obtained in America for samples of one hundred fabrics, and then from the same samples English price quotations were secured. These quotations and American costs were compared with the duties which would have been levied upon the goods if they had been imported. The costs of more than one thousand other fabrics were ascertained from American mills, and for some a comparison with tariff duties was made. On the basis of relative earnings and relative output per weaver, the comparative labor cost of weaving in the United States and England was indicated. In the summary this last series of comparisons was particularly emphasized.

In comparing domestic and foreign prices and domestic costs for the one hundred samples, warning is given that the figures should be used with caution. The price quotations are not for exactly the same date in both countries, and the American costs and prices are not all strictly comparable. It should also be remembered that more or less abnormal conditions prevailed in the cotton trade during the period for which the data were obtained. Business in general was depressed, and the cotton industry had been disturbed by two successive short crops of cotton.

As in spinning, similarly in the weaving industry, a uniform method of cost determination had to be applied to the records from all the mills. The direct costs for labor and material were readily ascertained, but an arbitrary system had to be chosen for distributing the burden of works expense and fixed charges. Although the method adopted by the Tariff Board may have been the best, at least for its purposes, it did not correspond to that employed by manufacturers. Consequently a manufacturer might

have fixed a different cost on any one of the fabrics analyzed, and where the cost figures given by the Tariff Board exceeded the price, thus suggesting a loss, the manufacturer might have reckoned a profit.

It is doubtless true that numerous American cotton mills have inadequate systems of cost determination, but so far as tariff legislation is concerned the question may be raised as to whether the costs fixed by the Tariff Board, or those fixed by the manufacturers, are to be used as the basis. A manufacturer may assert that he can afford to produce a fabric provided it can be sold so as to yield anything above direct costs and impose a relatively heavy share of the overhead burden on another product. If the duties are to be adjusted on the basis of comparative costs, Congress will have to decide which standard is to be used.

The cost of producing any fabric was found to vary between mills. The cost of manufacturing 36-inch sheeting (sample No. 5), for instance, was two cents per yard higher in one mill than in another. This was one of the widest variations shown in the report, but probably a more elaborate investigation would have revealed others equally great. Variations of one cent per yard in costs were numerous, and these often constituted divergences of fifteen or twenty per cent in the manufacturing cost. Minor discrepancies in structure exist between the samples for which English quotations were obtained and those for which American costs and prices were calculated. But neither these nor the above qualifications invalidate the report of the Tariff Board. On the contrary that report warrants definite conclusions.

By comparing the number of looms per weaver in England and the United States it was shown that even when allowance had been made for the difference in the speed of the looms, the output of cloth per weaver was, as a rule, considerably greater in American cotton mills. Although for the more fancy patterns the difference in the amount turned out per weaver was slight, for ordinary cloth the output was in some instances five times as great in this country. The bulk of the output of American mills consists of plain goods, and for the production of these the American manufacturers have adopted machinery and methods<sup>2</sup> which have enabled them to reduce the labor cost of weaving below the English level.

<sup>2</sup> In an article published in the *Quarterly Journal of Economics*, Nov., 1909, I discussed in detail this adaptation.

The comparison of prices made by the Tariff Board likewise indicates that many cotton fabrics are manufactured as cheaply in the United States as in England. In Table 172, English and American mill selling prices are given for 78 staple fabrics of plain construction, such as are produced in large quantities by American mills; on 53 of these, lower prices were placed by American manufacturers and on two, the price was the same as in England.

The relations of the duties to prices and costs are also pointed out. In the examples given for grey cloth included under paragraph 315 of the tariff law—cloth not exceeding 100 threads per square inch—the American selling prices were in every instance below the English quotations. The duties were from 21 to 43 per cent of the English prices, from nine tenths to nearly three times the American labor cost, and from 54 to 141 per cent of the total American conversion costs. The American prices for twenty-two fabrics included under paragraph 316—100 to 150 threads per square inch—were with two exceptions below the English prices. The duties were from 20.5 to 84.5 per cent of the English prices, and from 78 to over 246 per cent of the American conversion costs. Eleven comparisons were made of fabrics entered under paragraph 317—150 to 200 threads per square inch—and of these eight show lower selling prices in America. The duties ranged from 35 to 50 per cent of the English prices, and from 78.6 to over 159 per cent of the American manufacturing costs.

A comparison of prices on the finest fabrics, where the English prices would have been the lower, was not made. Nevertheless the report shows that as a rule the duties exceeded the American cost of manufacturing exclusive of the expense for raw material. Little information is given concerning the comparative prices of fabrics woven with fancy patterns. But it is stated that for these also the duty frequently exceeded the cost of manufacturing in the United States, and in every case was considerably in excess of the difference in cost.

From these comparisons the conclusion is to be drawn that all the duties on cotton cloth should be reduced and many of them swept away.

(3) In the tariff as it now stands the duties on bleached, dyed, printed, and mercerized fabrics are higher than on grey goods.

The Tariff Board found that for finished fabrics the addition to the duty on the grey cloth was seldom less than one cent per yard, and for one sample it amounted to 4-3/4 cents per yard. This additional tax generally exceeded the total cost of finishing. Moreover, for most of the samples the American finishing charges were lower than in England. For some processes the American cost was only one half the English. No reason was stated for the relatively low charges in America, but they have doubtless resulted from a larger scale of operation and higher speed of machinery. There seems to be little justification, therefore, for the imposition of heavier duties on finished cloth than on grey goods.

(4) The Tariff Board drew no conclusions in regard to the comparative costs of manufacturing knit-goods in this country and Germany. It merely gave some comparative figures. In Table 178 the domestic costs, the domestic and foreign selling prices, and the duties are given for nine samples of underwear. The duty exceeded the total cost of knitting. Some allowance must be made for the higher cost of spinning knitting yarns in the United States, but even then the duty would very nearly equal the total cost of spinning the yarn and knitting the fabric. These high duties have lessened imports and raised prices.

A few comparisons were also made for full-fashioned hosiery, and they showed lower costs in Germany. In order to get significant figures, however, a comparison should have been made between the costs of manufacturing full-fashioned goods in Germany and seamless goods in the United States. The Tariff Board in analyzing spinning costs properly compared English mule-spun yarn with American ring-spun yarn. A similar allowance for a difference in technical method should have been made in the case of knitting, since the cotton machine predominates in Germany and the seamless automatic in the United States. The costs of manufacturing certain kinds of seamless hosiery in the United States are given, but since there were no importations of such goods no comparison was attempted. Yet it could readily have been pointed out that for such goods the duties would probably have exceeded the manufacturing costs exclusive of raw materials.

The section of the report, therefore, which deals with knit-goods, is not satisfactory and will not be of much help to the legislators. Lack of time may have prevented the preparation of a conclusive statement. Presumably it was particularly difficult to obtain detailed information from foreign competitors



who have had their business repeatedly disturbed by alterations in our tariff duties. Nevertheless this part of the schedule is one to which great interest has been attached. It was in the duties on hosiery that the greatest increases in the cotton schedule were made by the act of 1909.

This report of the Tariff Board is less favorable to the protective system than the report on Schedule K. Hence it has been somewhat more coldly received by the supporters of that system. Although one large association of cotton manufacturers has commended the report on Schedule I, it is doubtful if its conclusions will meet with general approval amongst the mill-owners. They still more or less blindly fear foreign competition and fail to appreciate the advantages which have accrued from the development of machines and methods particularly adapted to the industrial conditions of the country. Their long-continued defense of the protectionist doctrines also makes them reluctant to acknowledge that the industry is no longer dependent on protection.

The results of the study of wholesale and retail prices, however, are a source of gratification to those who adhere to the protectionist principles. The fact that prices are in so many instances as low as in England indicates that the duties on cotton cloth place no serious burden on the consumer. The analysis of the system of distribution explains why it is that even when the manufacturers' prices are no greater in America retail prices are higher than abroad. For this the greater expense of distribution and the system of customary fixed prices are said to be responsible. In the President's message attention was called to the additions to manufacturers' prices by jobbers and retailers. And in their search for new debating ground others have asserted that the middlemen were beneficiaries of the protective system and that blame for high retail prices of cotton cloth did not rest on the manufacturers.

The review of the Tariff Board report by the secretary of the Home Market Club in Boston is suggestive. Though the report is accepted as impartial, the secretary avoids the conclusion that duties should be reduced. Attention is called to the fact that in the cost of production the item of interest was not included, although on account of higher cost of construction and equipment the interest charges would be greater in the United States. The

benefits of the protective duties to the jobber and retailer are emphasized. And it is asserted that if the duties are placed too low, importations will increase, operatives will be thrown out of work, and the middlemen, not the consumers, will receive the benefit. In this last chain of reasoning it is assumed that there would be a fairly large increase in imports even when manufacturers' selling prices are no higher in this country.

In that review the doctrine that tariff duties should be adjusted so as to equal the difference in cost of production is repudiated. Such duties would not be sufficiently high. An "equalizing" is not a "protective" tariff, it is said, since the former does not give an advantage to domestic producers. Protection thus seems to be made synonymous with prohibition. If that be the purpose of our tariff, the present duties on cotton manufactures should not be reduced. But why bother about rates at all? It would be far simpler to adopt the old-fashioned policy of specifically prohibiting the importation of those products which should be protected.

The lack of emphasis on the labor argument is also significant. The report of the Tariff Board proves that higher earnings by the operatives do not necessarily mean higher labor cost for the American cotton manufacturers. Heretofore this has never been admitted by the advocates of protection. This report, therefore, will cause some shifting in grounds of defense for the protective duties.

So far as legislation is concerned, the report, in spite of its short-comings, is serviceable. The difficulties encountered were such as might have been expected in an investigation where there was diversity in methods of cost accounting and wide variations in cost. And foreign manufacturers were naturally reluctant to reveal the details of their business. The evidence, to be sure, is least conclusive on those points where the greatest controversy will arise, and does not indicate just what duties should be fixed. None the less, it proves that there should be a genuine downward revision of the duties on cotton goods.

MELVIN T. COPELAND.

*New York University.*